

PATENT
Docket No: ST00025USU (SIRF.123USUI)
Serial No.: 09/967,136

REMARKS

Claims 1-8 are currently pending and Applicant has amended independent claim 1. Applicant believes that no new matter has been added in this response. Applicant also acknowledges that the Examiner has withdrawn the previous rejections and issued the current rejections in view of the Applicant's amendment made in their previous Non-Final Office Action response.

35 U.S.C §103(a) Rejection

The Examiner rejected claims 1-8 under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. 6,370,208) in view of Underbrink (U.S. 6,650,879) and in further view of Shenoi (U.S. 7,130,332).

Kuo et al.:

The Kuo et al. patent fails to describe a separate table being constructed for either the I term or Q term of the spread spectrum signal as claimed in independent claim 1 by the Applicant. The Kuo et al. patent only describes a single matrix made up of the bits representing both the I term and Q term. Further, the Underbrink or Shenoi references fail to teach or describe this element.

Therefore, the combination of Kuo et al. in view of Underbrink and in further view of Shenoi fails to teach or describe all of Applicant's claim elements as claimed in independent claim 1. Similarly, the claims that depend from independent claim 1, namely dependent claims 2-8, are also in condition for allowance.

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Shenoi:

On page 3 of the Final Office Action, the Examiner stated that "Shenoi discloses the correlation implementation in figure 6. The XOR block achieves the multiplication of the input samples by the PN code by inverting the bits of the input samples if the PN code-bit is logic-1 and leaving the input samples unchanged if the PN code-bit is logic-0 (column 11, lines 15-38). This function will account for signal phase inversion."

Upon reading column 11, lines 15-38, Applicant can only find a description of an "XOR" function being used for multiplication of the input samples with the generated PN sequence. No mention of accounting for signal phase inversion is mentioned. The only place it can be found is in the Final Office Action where the Examiner made the unsupported statement "THIS FUNCTION WILL ACCOUNT FOR SIGNAL PHASE INVERSION."

But, phase is discussed in another paragraph of the Shenoi patent that was not cited by the Examiner. In the Shenoi patent at column 11, lines 39-41, the Shenoi patent discloses that "[t]he "start of the PN Generator is achieved by circuitry not shown in FIG. 6 but which defines the "phase" of the PN generator relative to some arbitrary, but known, counter...", for example. Thus, the Shenoi patent states that the circuitry that defines the "phase" of the PN is not shown in FIG. 6. Thus, it is impossible for the Examiner to find that phase is accounted for by using an "XOR" when the reference states that Phase of the PN generator is controlled by circuitry not shown. If the Shenoi patent teaches anything, it teaches away from using "XOR" to accomplish the proper phase inversion as claimed by the Applicant in independent claim 1.

Turning to independent claim 1, Applicant is not claiming simply reducing the number of mathematical operations. Rather, Applicant is claiming "using the table during the correlation

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process to determine when a locally generated pseudorandom code and the incoming pseudorandom code received at the GPS receiver are correlated where the table accounts for signal phase inversion." Thus, Applicant is using a table that accounts for the signal phase inversion. This is supported on page 10 of the application lines 3-6 and page 11, lines 1-3.

For the above reasons, the combination of the Kuo et al. patent in view of the Underbrink patent and further in view of the Shenoi patent when combined, fails to teach or describe all of Applicant's claim elements for independent claim 1. Also if elements are missing when the references are combined, there can be no suggestion or motivation to combine the references and no likelihood of success when the references are combined. Therefore, independent claim 1 is in condition for allowance along with claims 2-8 that depend from independent claim 1.

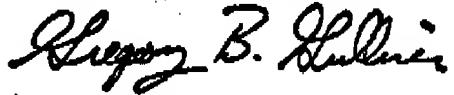
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CONCLUSION

In light of the above remarks, Applicant respectfully submits that the present application is now in proper condition for allowance, which such action is earnestly solicited.

Respectfully submitted,
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